

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/827,136	04/05/2001	Shyh-Pyng Gau	YUSO-116	5100	
7590 11/03/2004			EXAM	EXAMINER	
Raymond Sun			LAM, TUAN THIEU		
12420 Woodhall Way Tustin, CA 92782			ART UNIT	PAPER NUMBER	
			2816	2816	
			DATE MAILED: 11/03/2004		

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)					
Office Action Commence	09/827,136	GAU, SHYH-PYNG					
Office Action Summary	Examiner	Art Unit					
	Tuan T. Lam	2816					
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply							
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).							
Status							
1) Responsive to communication(s) filed on 14 Se	) Responsive to communication(s) filed on 14 September 0204.						
2a) ☐ This action is <b>FINAL</b> . 2b) ☐ This	This action is <b>FINAL</b> . 2b) This action is non-final.						
	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.							
Disposition of Claims							
4)⊠ Claim(s) <u>1-17</u> is/are pending in the application.							
4a) Of the above claim(s) is/are withdrawn from consideration.							
5)⊠ Claim(s) <u>2-17</u> is/are allowed.							
6)⊠ Claim(s) <u>1</u> is/are rejected.	6)⊠ Claim(s) <u>1</u> is/are rejected.						
7) Claim(s) is/are objected to.							
8) Claim(s) are subject to restriction and/or election requirement.							
Application Papers							
9)☐ The specification is objected to by the Examiner.							
10)⊠ The drawing(s) filed on <u>4/5/2001</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).							
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.							
Priority under 35 U.S.C. § 119							
12)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a)□ All b)□ Some * c)⊠ None of:							
<ol> <li>Certified copies of the priority documents have been received.</li> </ol>							
2. Certified copies of the priority documents have been received in Application No							
3. Copies of the certified copies of the priority documents have been received in this National Stage							
application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.							
oce the attached detailed Office action for a list of the certified copies not received.							
	•	,					
Attachment(s)							
1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)							
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  Paper No(s)/Mail Date.  Notice of Informal Patent Application (PTO-152)							
Paper No(s)/Mail Date	6) Other:	atom Application (CTO-102)					
S. Patent and Trademark Office							

Art Unit: 2816

### **DETAILED ACTION**

This is a response to the amendment filed 9/14/2004. Claims 1-17 are under examination. The rejection of claims 3, 5, 8-9 and 14-17 under 35USC 112, second paragraph has been withdrawn in view of the amendment.

## Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 2. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Vangal (USP 6,535,045), prior art of record. Figure 5 of Vangal shows data buffer (102, 106, 110) comprising a rising edge device (120, 140, 130) having a trigger circuit (120) and a plurality of rising edge circuits (140, 130), a falling edge device (122, 142, 132) having a trigger circuit (122), a plurality of falling edge circuits (142, 132), wherein said buffer circuit Vangal is capable of extending a timing margin thereof for sampling correct data as called for in claim 1.

## Allowable Subject Matter

- 3. Claims 2-17 are presently allowed.
- 4. The following is a statement of reasons for the indication of allowable subject matter: the Vangal reference fails to teach or fairly suggest said trigger circuit of said rising edge device comprises a ring counter for receiving a clock signal and counting in response to said clock signal so as to generate a first rising flag signal and a second rising flag signal as called for in claim 2, , said trigger circuit so said falling edge device comprises a ring counter receiving a

Art Unit: 2816

clock signal and counting in response to said clock signal, so as to generate a first falling flag signal and as second falling flag signal as called for in claim 4, ring counter, operative for generating a rising flag signal for data sampling, said plurality of flip flops are clocked by and AND operation output as called for in claim 11, falling edge circuit clock by an OR operation output, provided by an OR gate of said clock signal and said falling flag signal as called for in claim 14.

#### Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan T. Lam whose telephone number is 571-272-1744. The examiner can normally be reached on Monday to Friday (7:30 am to 6:00pm).

Application/Control Number: 09/827,136 Page 4

Art Unit: 2816

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, TIMOTHY P CALLAHAN can be reached on 571-272-1740. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tuan T. Lam
Primary Examiner
Art Unit 2816

10/29/2004